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possibly because he had seen me the first time. I had only one good view of him on the ground.

Mr. Faxon devoted his entire attention this evening to studying the aerial flight. His conclusions are that during the production of each set of musical (water-whistle) notes, the bird holds his wings extended and *set*, whether he be sailing or pitching down sharply at the time; and further that the wings invariably move rapidly and continuously in a whirring manner during the intermittent periods of twittering.

This morning Mr. Faxon found the bird already peeping at 4.15. He watched him through one peeping spell at a distance of fifteen feet (measured) from behind a small leafless bush.



BIRDS OF SOUTH-CENTRAL MONTANA.

BY CHAS. W. RICHMOND AND F. H. KNOWLTON.

THE observations recorded in this paper were confined almost entirely to Gallatin County, with short visits into the western part of Park County north of the Yellowstone National Park, and into the eastern portions of Madison and Jefferson Counties. The area embraced is about 75 miles in north and south direction, and 30 miles in east and west, or approximately 2500 square miles. It lies along the eastern flank of the Rocky Mountains, in the south-central portion of this great State. It is very much diversified, including the broad, fertile Gallatin Valley on the north with an altitude of only 4600 feet, the long, narrow Madison Valley on the west, the elevation of which is about 5000 feet, and the Gallatin and Madison ranges of mountains in the southern portion, with a general elevation of from 6000 to 9000 feet, with many peaks rising above 10,000 feet, and a few to over 11,000 feet. In the extreme northern portion of the area under discussion the three rivers—Gallatin, Madison and Jefferson—unite to form the headwaters of the Missouri. These streams all rise in the mountains far to the south and southwest, and hence flow approximately north. In their courses through the mountains they have in many places

cut for themselves deep cañons, producing scenery of the wildest and grandest kind.

Bozeman (altitude 4754 feet), a town pleasantly situated on the eastern side of the Gallatin Valley, and on the East Gallatin River, was made the headquarters. Some collecting was done in this vicinity, especially near Fort Ellis, and, farther south, in and about Rocky Cañon and Bridger Cañon. During the latter part of July an excursion was made to Mystic Lake, a small body of crystal water at an elevation of about 7800 feet, in the Gallatin Range 20 miles southeast of Bozeman. Thence it was continued over the divide into the Yellowstone Valley as far as Coalpit Creek and returning by way of Traill Creek (altitude 7000 feet) and Bear Creek. A number of species were found breeding at that time, as well as young birds observed.

Another excursion, extending from August 1 to October 3, was made up the Gallatin, with stops at Bear Creek (5800 feet), Spanish Creek (5400 feet), Squaw Creek (5600 feet), Gallatin Cañon (the stream is about 6000 feet with abrupt walls and receding ridges rising to 7000 and 8000 feet), West Fork of the Gallatin (6500-9000 feet), Lower Basin (6000-8000 feet), Middle Basin (7000-9000 feet), Taylor's Fork, also called Dodge Creek (7000-9500 feet), and Big Horn Peak (10,000 feet).

Still another excursion, extending from August 5 to September 27, started from Bozeman, with stops at Reese Creek (5400 feet) in the northern portion of the Gallatin Valley, East Gallatin River near Hillsdale (4600 feet), Pass Creek near Flathead Pass in the Bridger Range (about 5000 feet), head of Dry Creek at north end of Bridger Range (5500 feet), Gallatin Station (4000 feet), Jefferson River near Three Forks (4000 feet), Madison River near Willow Creek (4600 feet), camp in the valley between the Madison and Gallatin Rivers (4600-5500 feet), Fort Ellis, and Mystic Lake. The first two trips, occupying the time from July to October 3, were made by Mr. Knowlton in 1890; the third, from August 5 to about the first of October, was made jointly in 1888.

From this hasty itinerary it appears that the area studied extended in elevation from a little over 4000 feet to over 10,000

feet. In the northern and western portions where the elevation was lowest, the land is largely under cultivation. On rising into the foothills thickets of quaking aspen (*Populus tremuloides*) are abundant, extending also into the open valleys as high as 8000 feet. In the southern and eastern more mountainous portion the prevailing forest tree is the black pine (*Pinus murrayana*), which reaches its greatest development on the dryer plateaus between 7000 and 8000 feet, although it is found from the lower altitudes (5500 feet) up to 9500 feet. The Douglas or red fir (*Pseudotsuga douglussii*) is found up to 9000 feet, generally scattered over the dryer grassy ridges and slopes where it forms loose groves. *Pinus flexilis* is also common on dry gravelly ridges from 6000 feet to about 8000 feet. Next to the black pine the balsam (*Abies subalpina*) is most abundant and widest in distribution, being found throughout in cool, moist situations, at low elevations on the northern slopes, and especially common on wet subalpine slopes above 8000 feet. Little less abundant and occupying approximately the same situations is the spruce (*Picea engelmanni*).

The observations recorded are far from exhaustive, for they were made in the midst of other engrossing duties which demanded first attention. They record simply what we were able to note in the time at our disposal. We had hoped that our observations might be supplemented by additional and more detailed work, but as there appears no prospect of this, we present the notes in the hope that they may be of assistance to future students of the bird life of this region.

Of the list of 111 species, specimens were obtained of 93 of them, represented by nearly 700 specimens.

In addition to these we saw several large Owls (*Bubo?*), not satisfactorily identified; some Hawks, and smaller birds, names not determined, and which are therefore not given a place in the list.

The following species mentioned by Mr. Geo. Bird Grinnell¹ were not met with by us:—

¹ War Department—Report of a Reconnaissance from Carroll, Montana Territory, on the Upper Missouri, to the Yellowstone National Park, and return, made in the Summer of 1875. By Wm. Ludlow. Washington, Government Printing Office, 1876. Zoölogy by Geo. Bird Grinnell. Birds, pp. 72-92.

Tachycineta thalassina. VIOLET-GREEN SWALLOW.—“Very numerous about Fort Ellis.”

Spizella monticola ochracea. TREE SPARROW.—“Three or four seen in Bridger Mountains early in September.”

Totanus flavipes. YELLOW-LEGS.—“A few seen near Fort Ellis.”

Tringa minutilla. LEAST SANDPIPER.—“Only observed near Fort Ellis, where it was abundant early in September.”

Tringa bairdii. BAIRD'S SANDPIPER.—“Flocks of 50 or 60 noticed at Fort Ellis and Gardiner's Springs.”

Gallinago delicata. WILSON'S SNIPE.—“One seen near Fort Ellis.”

From Dr. Merriam's report¹ we quote:—

Gallinago delicata.—“Shot at Fort Ellis July 9, 1872.”

Sturnia ulula caparoch.—“Shot on Madison River, Montana, August 11, 1872.”

This last was, however, taken beyond the limits of the present paper.

Attention should also be called to the notes on Montana birds by Mr. Robert S. Williams in former numbers of ‘The Auk’,² and to those of Capt. P. M. Thorne.³ These papers refer to localities somewhat beyond the limits set in the present paper, but may be consulted with profit by the student of the birds of this region.

In conclusion we desire to acknowledge the greatest assistance from Dr. A. C. Peale, then of the U. S. Geological Survey, by whose kindness the observations here presented were made possible.

1. **Larus californicus.** WESTERN GULL.—One was seen on the Jefferson River, about September 15.

2. **Merganser serrator.** RED-BREASTED MERGANSER.—Noted several times during August and September in flocks of from four to twenty.

3. **Anas boschas.** MALLARD.—Very common.

4. **Anas carolinensis.** GREEN-WINGED TEAL.—Frequently seen in small numbers on the tributaries of the rivers.

¹ Sixth Annual Report of the United States Geological Survey of the Territories, for 1872. Washington, Government Printing Office, 1873. Reports on Mammals and Birds by C. Hart Merriam. Birds, pp. 670-715.

² The Auk, III, 1886, p. 274; V, 1888, pp. 14-18; VII, 1890, pp. 292, 293, etc.

³ Ibid., VI, 1889, p. 336.

5. *Branta canadensis*. CANADA GOOSE.—One small flock of six seen on the Madison River late in September. During our stay in the vicinity, this flock was noticed each morning as it passed by to some feeding grounds up the river, and again on its return at night.

6. *Botaurus lentiginosus*. AMERICAN BITTERN.—Several seen.

7. *Ardea herodias*. GREAT BLUE HERON.—Rather common.

8. *Porzana carolina*? SORA.—A small Rail was seen in a marshy tract on the East Gallatin, about the middle of August, that we refer with little doubt to this species.

9. *Phalaropus lobatus*. NORTHERN PHALAROPE.—Four specimens were shot at a mountain pool, in September.

10. *Totanus melanoleucus*. GREATER YELLOW-LEGS.—Rather common in September. Several specimens obtained in this region appear to be somewhat paler than eastern examples, accompanied by slight differences in size.

11. *Totanus solitarius cinnamomeus*. WESTERN SOLITARY SAND-PIPER.—Found in September along the smaller streams, usually in pairs.

12. *Symphemia semipalmata inornata*. WESTERN WILLET.—One pair observed, near Moreland, August 19, along a shallow, pebbly stream.

13. *Actitis macularia*. SPOTTED SANDPIPER.—Quite common.

14. *Numenius longirostris*. LONG-BILLED CURLEW.—One individual seen late in August, on the foothills north of the Gallatin Valley.

15. *Ægialitis vocifera*. KILLDEER.—Very common. We frequently came upon them crouching close to the ground, as if to escape detection, and on such occasions were almost in the midst of a flock of twenty or so before aware of their presence.

16. *Dendragapus obscurus*. DUSKY GROUSE.—Very common in the mountains and in well-wooded ravines in the foothills. A single specimen preserved is not quite typical.

17. *Bonasa umbellus*, SUBSP.—A Ruffed Grouse was shot on Taylor's Fork, but not preserved.

18. *Pediocætes phasianellus campestris*? PRAIRIE SHARP-TAILED GROUSE.—Very common in the valleys. A head and wing saved for identification are doubtfully referred to this subspecies.

19. *Centrocercus urophasianus*. SAGE GROUSE.—Abundant throughout the valleys, in the patches of sage brush (*Artemisia*).

20. *Zenaidura macroura*. MOURNING DOVE.—Very common. An unfledged young bird was found on a hillside August 31.

21. *Cathartes aura*. TURKEY VULTURE.—Common.

22. *Circus hudsonius*. MARSH HAWK.—Common.

23. *Accipiter atricapillus*. AMERICAN GOSHAWK.—Three seen, one of which was shot but not preserved.

24. *Accipiter velox*. SHARP-SHINNED HAWK.—One specimen secured.

25. *Buteo borealis calurus*. WESTERN RED-TAIL.—Quite common.

26. *Buteo swainsoni*. SWAINSON'S HAWK.—About as numerous as the preceding.

27. *Aquila chrysaëtos*. GOLDEN EAGLE.—Quite common. Parties of three or four, apparently old birds with their offspring, were often seen circling about high overhead.

28. *Falco richardsonii*. RICHARDSON'S MERLIN.—One shot September 23, on the Madison River, was the only one identified. Its stomach contained the remains of a Lincoln's Sparrow.

29. *Falco sparverius*. SPARROW HAWK.—Abundant. Its food here is mainly grasshoppers.

30. *Pandion haliaëtus carolinensis*. AMERICAN OSPREY.—Rather common.

31. *Asio wilsonianus*. AMERICAN LONG-EARED OWL.—Frequently noted along the Jefferson River in heavy thickets. A specimen shot here was found to have a long, slender, thread-like worm under its tongue, similar to those found infesting the fish of the Jefferson River. The presence of one of these parasites in the Owl would indicate an occasional fish diet for that bird.

32. *Ceryle alcyon*. BELTED KINGFISHER.—Very common along all the streams. Several were noted at Mystic Lake. At our camp on the Jefferson River we found the fish infested with long, slender white worms, which were coiled up in the flesh on the sides of the back. A Kingfisher shot at this camp was also found to be infested with these worms, seven of which (some of them nearly a foot in length) were found among (not *in*) its intestines.

33. *Dryobates villosus hyloscopus*. CABANIS'S WOODPECKER.—One specimen secured.

34. *Dryobates pubescens oreæcus*. MOUNTAIN DOWNY WOODPECKER.—Two specimens taken.

35. *Picoides arcticus*. ARCTIC THREE-TOED WOODPECKER.—Rare; one taken in the Gallatin Basin, August 29.

36. *Picoides americanus dorsalis*. ALPINE THREE-TOED WOODPECKER.—Two specimens secured on the Gallatin River, August 24, altitude about 7200 feet.

37. *Sphyrapicus varius nuchalis*. RED-NAPED SAPSUCKER.—Several collected from July to September. Breeds.

38. *Sphyrapicus thyroideus*. WILLIAMSON'S SAPSUCKER.—Rather uncommon at Traill Creek and Gallatin Basin, where three immature birds, evidently raised in the vicinity, were secured August 28–September 3.

39. *Melanerpes torquatus*. LEWIS'S WOODPECKER.—Common in the mountains and foothills, in tracts of dead timber.

40. *Colaptes cafer*. RED-SHAFTED FLICKER.—Common. Regardless of its color it is known to some of the residents as "Yellowhammer."

41. *Chordeiles virginianus henryi*. WESTERN NIGHTHAWK.—Very common. These birds were often seen on foraging expeditions during midday, in flocks of twenty or more. Most abundant in the valleys.

42. *Stellula calliope*. CALLIOPE HUMMINGBIRD.—Two individuals were noted, one of which, an immature bird, was obtained August 12, at Bear Creek.

43. *Tyrannus tyrannus*. KINGBIRD.—Common.

44. *Sayornis saya*. SAY'S PHOEBE.—Two specimens secured, and these were the only ones seen.

45. *Contopus borealis*. OLIVE-SIDED FLYCATCHER.—One shot on Traill Creek, July 28.

46. *Contopus richardsonii*. WESTERN WOOD PEWEE.—Taken on Spanish Creek about the middle of August.

47. *Empidonax minimus*. LEAST FLYCATCHER.—One specimen secured on Bear Creek, August 13; this is an adult female, and is clearly referable to the above species.

48. *Empidonax hammondi*. HAMMOND'S FLYCATCHER.—Three immature birds were secured on Squaw Creek, August 19-20.

49. *Empidonax wrightii*. WRIGHT'S FLYCATCHER.—Quite common; found usually in wooded ravines in the foothills. Fully fledged young birds were found throughout the month of August.

50. *Otocoris alpestris arenicola*. DESERT HORNED LARK.—Very abundant everywhere in the valleys and on the foothills. Many young in the nestling plumage were found during August. The old birds at this time were in worn and faded plumage, and moulting. About September 20 large numbers of Horned Larks began to arrive from the north, and we noted hundreds of them daily. Over sixty specimens were preserved, and all of them are referable to the subspecies *arenicola*, although a few, obtained from the ranks of the migratory flocks arriving late in September, approach *O. a. merrilli* in the possession of a yellowish edging to the black crescent on the breast. The subspecies *leucolæma* had apparently not arrived by the first of October, at which time our observations ceased, but we have received numbers of this form from the vicinity of Bozeman in midwinter.

51. *Pica pica hudsonica*. AMERICAN MAGPIE.—Very abundant, but shy. Most numerous in the valleys, but noted also in the mountains. Several seen at Mystic Lake.

52. *Cyanocitta stelleri annectens*. BLACK-HEADED JAY.—Only occasionally seen in the mountains. Three were seen near the upper end of Gallatin Basin, at an altitude of about 9000 feet. Adults and young secured.

53. *Perisoreus canadensis capitalis*. ROCKY MOUNTAIN JAY.—Very common in the mountains from the lowest limit of the coniferous forests up to at least 9000 feet, above which altitude we did not have occasion to go. These birds were known locally by a variety of names, such as Meatbird, Meathawk, Campbird, Camprobber, and by others who had known the bird in Colorado, they were called Baldhead, Tallowhead and Whitehead. Immature birds with traces of the dark first plumage were found at Mystic Lake July 27.

54. *Corvus americanus*. AMERICAN CROW.—Abundant and very tame. There was a Crow roost in the mountains, about five miles south of Fort Ellis, and fully five hundred Crows passed over our camp morning and evening to and from this roost. During the day they were scattered over the Gallatin Valley. They appeared to be rather less noisy than eastern Crows and so unusually tame that one could approach them at any time within easy gun range, without resort to strategy.

55. *Nucifraga columbiana*. CLARKE'S NUTCRACKER.—Common in the mountains, and occasionally found on some of the higher foothills, where we saw them at an elevation of about 6000 feet. At Mystic Lake we saw one of these birds soaring in circles, like a hawk, with its white tail fully spread. One shot on Traill Creek was found to have eighty-two piñon seeds in its gullet.

56. *Dolichonyx oryzivorus*. BOBOLINK.—Very common at one place in the northern part of Gallatin Valley, where, about the middle of August, we found a large number in a rank growth of wild sunflowers (*Helianthus*). This was in close proximity to, and in fact to some extent adjoining, a considerable tract of nearly ripe oats. Although the birds were swarming in the former, we found only a few stray birds in the latter field.

57. *Molothrus ater*. COWBIRD.—An immature individual shot about the middle of August was the only one observed.

58. *Sturnella magna neglecta*. WESTERN MEADOWLARK.—Abundant.

59. *Icterus bullocki*. BULLOCK'S ORIOLE.—No birds of this species were seen, but a nest no doubt belonging to this Oriole was found in some willows on the East Gallatin.

60. *Scolecophagus cyanocephalus*. BREWER'S BLACKBIRD.—Very abundant, especially in the fall, when these birds were seen in flocks of thousands. During August we met with them usually in small numbers about the ranches and cowpens, and occasionally scattered along the roadside, resting in the shadows of the fenceposts from the heat of midday.

61. *Pinicola enucleator*. PINE GROSBEAK.—Occasionally observed. One was shot at Mystic Lake in the latter part of September, and another in July on Traill Creek, where it breeds.

62. *Loxia curvirostra minor*. AMERICAN RED CROSSBILL.—About a dozen seen in Gallatin Basin in September.

63. *Spinus tristis*. AMERICAN GOLDFINCH.—Common.

64. *Spinus pinus*. PINE SISKIN.—Rather common on the foothills, where it breeds. A fully fledged young bird was shot late in August.

65. *Poocætes gramineus confinis*. WESTERN VESPER SPARROW.—Very common, especially in the fall.

66. *Ammodramus sandwichensis alaudinus*. WESTERN SAVANNA SPARROW.—Abundant. First noted about the last of August.

67. *Ammodramus savannarum perpallidus*. WESTERN GRASSHOPPER SPARROW.—One bird, presumably this form, was seen in the Gallatin Valley.

68. *Chondestes grammacus strigatus*. WESTERN LARK SPARROW.—A few seen during August, when two immature birds were obtained.

69. *Zonotrichia leucophrys intermedia*. INTERMEDIATE SPARROW.—Very common in the valleys after the first of September. Breeds in the mountains, where it was noted on Traill Creek in July.

70. *Spizella socialis arizonæ*. WESTERN CHIPPING SPARROW.—Common.

71. *Spizella breweri*. BREWER'S SPARROW.—Commonly found in rocky ravines among the foothills, in stubby pines and brush.

72. *Junco hyemalis shufeldti*. SHUFELDT'S JUNCO.—Three specimens of this form were taken at Taylor's Fort (alt. 7500 feet), September 7 and 8.

73. *Junco annectens*. PINK-SIDED JUNCO.—Commonly found in the valleys after the first of September. It was more abundant in the mountains, where it breeds. Young birds were taken at Mystic Lake late in July.

74. *Melospiza fasciata montana*. MOUNTAIN SONG SPARROW.—Very common.

75. *Melospiza lincolni*. LINCOLN'S SPARROW.—Rather common. Noted in the valleys, where several specimens were secured in the early part of September. A *Falco richardsonii* shot September 23 had the remains of one in its stomach. It breeds in the mountains, where, at Traill Creek, a young bird was secured July 29.

76. *Pipilo maculatus arcticus*. ARCTIC TOWHEE.—Quite common in ravines leading into the foothills. Young birds noted in August.

77. *Pipilo chlorurus*. GREEN-TAILED TOWHEE.—Uncommon, in situations similar to that of the preceding.

78. *Habia melanocephala*. BLACK-HEADED GROSBEAK.—Several noted, including young birds hatched in the vicinity.

79. *Passerina amœna*. LAZULI BUNTING.—Quite common in the valleys and foothills; breeds.

80. *Piranga ludoviciana*. LOUISIANA TANAGER.—A few seen in September at the lower elevations. Noted common and breeding at Mystic Lake late in July.

81. *Petrochelidon lunifrons*. CLIFF SWALLOW.—Quite common.

82. *Chelidon erythrogastra*. BARN SWALLOW.—Abundant. We found them gathered in long strings on the telegraph wires early in September.

83. *Tachycineta bicolor*. TREE SWALLOW.—Common. A colony noted about the middle of August in a clump of cottonwoods, where the old birds were still feeding young.

84. *Clivicola riparia*. BANK SWALLOW.—Common; young birds barely able to fly were observed after the middle of August, and some of the nests were apparently still occupied. It may be interesting to note in this connection that in the neighborhood of Washington, D. C., at this date, the resident Bank Swallows have long since finished nesting and

left the vicinity of their breeding grounds to gather in larger squads on the marshes of the Potomac, and many of them have, even by the middle of July, begun to migrate down the river. Migratory birds are, however, noted in the vicinity of Washington through most of September.

85. *Ampelis cedrorum*. CEDAR WAXWING.—Common.

86. *Lanius ludovicianus excubitorides*. WHITE-RUMPED SHRIKE.—Common in the valleys. A single Shrike was also noted in the mountains in September. It was very likely *L. borealis*.

87. *Vireo gilvus*. WARBLING VIREO.—Common in the willows and cottonwoods along streams in the valleys.

88. *Helminthophila celata*. ORANGE-CROWNED WARBLER.—Two specimens were secured at low elevations September 2 and 15.

89. *Dendroica aestiva*. YELLOW WARBLER.—Common.

90. *Dendroica auduboni*. AUDUBON'S WARBLER.—Very common during September both in the mountains and in the valleys. Breeds in the mountains; numbers were observed at Mystic Lake late in July.

91. *Geothlypis macgillivrayi*. MACGILLIVRAY'S WARBLER.—Common; breeds.

92. *Geothlypis trichas occidentalis*. WESTERN YELLOW-THROAT.—Very common.

93. *Sylvania pusilla pileolata*. PILEOLATED WARBLER.—Very common from the middle of August until late in September, in the valleys.

94. *Setophaga ruticilla*. AMERICAN REDSTART.—Common in the valleys.

95. *Anthus pensilvanicus*. AMERICAN PIPIT.—Very common in the fall. This species made its appearance toward the end of September, mingling freely with the Horned Larks, which were arriving in large numbers at that time.

96. *Cinclus mexicanus*. AMERICAN DIPPER.—Generally distributed in the mountain region.

97. *Oroscoptes montanus*. SAGE THRASHER.—One immature bird secured, and another seen at low elevations.

98. *Galeoscoptes carolinensis*. CATBIRD.—Common in the valleys.

99. *Salpinctes obsoletus*. ROCK WREN.—Quite abundant. Young birds were plentiful during August.

100. *Troglodytes aëdon aztecus*. WESTERN HOUSE WREN.—Common. A nest found in a dead stump in a cottonwood thicket August 13, contained four half-fledged young.

101. *Certhia familiaris montana*. ROCKY MOUNTAIN CREEPER.—A specimen shot September 23, in Jefferson Valley, was the only one seen.

102. *Sitta carolinensis aculeata*. SLENDER-BILLED NUTHATCH.—Uncommon; but found breeding at several places in the mountains.

103. *Sitta canadensis*. RED-BREASTED NUTHATCH.—Two specimens obtained at low elevations in September. These specimens, and others from the Mississippi Valley westward, are somewhat brighter on the under-

parts than average eastern birds. There appears to be no difference in size.

104. *Parus atricapillus septentrionalis*. LONG-TAILED CHICKADEE.—Very abundant along the streams in the valleys, travelling about in small troops in the cottonwoods and willows.

105. *Parus gambeli*. MOUNTAIN CHICKADEE.—Common in the mountains, and extending down on the foothills as far as coniferous trees occur. The hoarse, drawling note of this bird is easily distinguished from the energetic one of the preceding species. After the middle of September we found them sparingly in the valleys, associating with flocks of the Long-tailed species.

106. *Regulus satrapa olivacea*. WESTERN GOLDEN-CROWNED KINGLET.—Breeds in the mountains. An immature bird just leaving the nestling plumage was secured August 28. The species was quite common in the vicinity of Mystic Lake about the last of September, but no individuals were seen at any time in the valleys.

107. *Regulus calendula*. RUBY-CROWNED KINGLET.—Common during September in the valleys. It was not noted in the mountains.

108. *Turdus ustulatus swainsonii*. OLIVE-BACKED THRUSH.—Several specimens collected are referable to this form. Young birds in first plumage were secured July 27, at Mystic Lake, and August 27, at the north end of Gallatin Valley.

109. *Turdus aonalaschæ auduboni*. AUDUBON'S HERMIT THRUSH.—Several obtained. A young bird in nestling plumage was secured July 27, at Mystic Lake. An adult was taken September 11, at an elevation of 8500 feet.

110. *Merula migratoria propinqua*. WESTERN ROBIN.—Common in the valleys, and also noted in some numbers in the mountains.

111. *Sialia arctica*. MOUNTAIN BLUEBIRD.—Common; breeds. Found migrating in small flocks during September.

Too late for insertion in its proper place in the list, we find that an immature specimen of the Rough-winged Swallow (*Stelgidopteryx serripennis*) was collected by us near Hillsdale, in Gallatin Valley, August 22, 1888. The bird was doubtless raised in the vicinity. This appears to be somewhat north of its usual range.